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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,382	06/26/2001	Dennis G. Thibedeau	10473-785	9501

7590 12/31/2003

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EXAMINER	
HE, AMY	

ART UNIT	PAPER NUMBER
2858	

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/888,382	THIBEDEAU ET AL.	
	Examiner	Art Unit	
	Amy He	2858	MW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16 and 23-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16 and 23-28* is/are rejected.

7)☒ Claim(s) *29* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 April 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-2, 4-6, 11-16 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salley et al. (U.S. Patent No: 5,254,952), in view of Suga et al. (U. S. Patent No. 5, 789, 935)

Referring to claims 4 and 16, Salley discloses a method for evaluating the operation of an alternator, comprising the steps of:

coupling a load (carbon pile assembly 30 in Figure 8) to the alternator(154 in Figure 7)(column 10, lines 33-41); and

detecting (or evaluating) the characteristics (or the operation) of an alternator output signal representative of an output of the alternator (155 in Figure 7, column 10, line 38).

Still referring to claims 4 and 16, Salley does not specifically disclose detecting the alternator output signal only after a first predetermined period of time, which is chosen such that the detected alternator output signal is stable. Suga et al. (U. S. Patent No. 5, 789, 935) discloses waiting a predetermined period of time, in order for a

motor current to become stabilized before measuring the motor current (column 5, lines 38-40). A person of ordinary skill in the art would find it obvious at the time of the invention to modify Salley to wait a period of time for the output signal to be stabilized, as taught by Suga, before detecting the alternator outputs signal, in order to obtain a more accurate result by detecting from a stabilized output signal.

Referring to claims 1-2 and 26, Salley in view of Suga discloses a method for evaluating the operation of an alternator as in claim 4 and 16, further including a step of detecting (corresponding to the operator making sure that the engine speed is increased to the rpm prescribed by the manufacturer to ensure that the alternator is capable producing its maximum output, column 32, lines 20-24) a motor speed or an alternator speed and coupling (corresponsive to the operator pressing the start key 213, thus, loading the default value to the alternator and start the alternator testing) the load upon the motor speed or the alternator speed reaching a predetermined level .

Referring to claim 13, Salley discloses a system for evaluating the operation of an alternator, comprising:

a load (carbon pile assembly 30 in Figure 8);

a terminal (terminal near 155 in Figure 7)for receiving an alternator output signal representative of an alternator characteristic;

a switch device (start key 213 in Figure 6) for selectively coupling the load to the alternator;

a controller (the combination of tester 200 in Figure 8 and an operator) for determining characteristics of the alternator output signal and for generating a first

switch operation signal to control the switch device to couple the load to the alternator (by the operator pressing the start key).

Still referring to claim 13, Salley does not specifically disclose detecting the alternator output signal only after a first predetermined period of time, which is chosen such that the detected alternator output signal is stable. Suga et al. (U. S. Patent No. 5, 789, 935) discloses waiting a predetermined period of time, in order for a motor current to become stabilized before measuring the motor current (column 5, lines 38-40). A person of ordinary skill in the art would find it obvious at the time of the invention to modify Salley to wait a period of time for the output signal to be stabilized, as taught by Suga, before detecting the alternator outputs signal, in order to obtain a more accurate result by detecting from a stabilized output signal.

Referring to claim 15, Salley discloses that the alternator (154 in Figure 7) is used in an automotive vehicle to charge a battery (column 9, lines 27-33).

Referring to claim 6, Salley discloses a system for evaluating the operation of an alternator driven by a motor comprising:

a load (carbon pile assembly 30 in Figure 8);

a terminal (terminal near 155 in Figure 7)for receiving an alternator output signal representative of an alternator characteristic;

a sensor (the operator) for generating a speed signal representative of an engine speed or an alternator speed;

a switch device (start key 213 in Figure 6) for selectively coupling the load to the alternator;

a controller (the combination of tester 200 in Figure 8 and an operator) for determining characteristics of the alternator output signal and for controlling operation of the switch device;

wherein, in response to the speed signal indicating the engine speed or the alternator speed reaching a predetermined level (i.e. when the operator senses that the engine or alternator speed is at a certain level), the controller (the operator) generating a first switch operation signal (pressing the start key) to control the switch device (the start key) to couple the load to the alternator.

Salley does not disclose the controller coupling to the sensor, the terminal and the switch device for automatically generating the switch operation signal to control the switch device to couple the load in response to the sensor signal. However, broadly providing an automatic or mechanical means to replace a manual activity that accomplished the same result is not sufficient to distinguish over the prior art. See in re Venner, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958). A person of ordinary skill in the art at the time of the invention would find it obvious to modify Salley to include this automating step to better control the alternator testing system.

Still referring to claims 16 and 27, Salley does not specifically disclose detecting the alternator output signal only after a first predetermined period of time, which is chosen such that the detected alternator output signal is stable. Suga et al. (U. S. Patent No. 5, 789, 935) discloses waiting a predetermined period of time, in order for a motor current to become stabilized before measuring the motor current (column 5, lines 38-40). A person of ordinary skill in the art would find it obvious at the time of the

invention to further modify Salley to wait a period of time for the output signal to be stabilized, as taught by Suga, before detecting the alternator outputs signal, in order to obtain a more accurate result by detecting from a stabilized output signal.

Referring to claim 11, Salley discloses that the load is constructed to draw at least 50 amperes of current from the alternator (column 26, lines 1-10).

Referring to claims 5, 12, 14 and 28, Salley discloses that the controller generates a second switch operation signal to control the switch to decouple the load (i.e. terminating the alternator test) from the alternator after the load has been coupled to the alternator for a second predetermined period of time (i.e. when the timer times out a default time, the alternator test is terminated, column 11, lines 3-7).

2. Claims 3 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salley et al. (U.S. Patent No: 5,254,952), in view of Suga et al. (U. S. Patent No. 5, 789, 935), and further in view of Tanaka (U. S. Patent No. 4, 895, 308).

Referring to claims 3 and 7-10, Salley in view of Suga discloses the method of claims 1 and 6. Salley in view of Suga does not specifically disclose a Nichrome coil as the load; a handheld housing; and a fan for dissipating the heat generated by the load. Tanaka discloses a Nichrome coil, a handheld housing and a fan (column 2, lines 40-59). Since it has been held to be within the general skill of a worker in the art to select a known tool for a known purpose on the basis of its suitability for the intended use as a matter of obvious design choice (*In re Leshin,* 227 F.2d 197, 125 USPQ 416 (CCPA), It would have been obvious to one of ordinary skill in the art at the time the invention was

made to further modify Salley to use a conventional Nichrome coil, as taught by Tanaka, as the load for the known purpose of better fitting into a portable/handheld housing since Nichrome coil occupies a small volume. Furthermore, it would have been obvious to modify Salley to use a conventional fan, as taught by Tanaka, as the known tool for the known purpose of dissipating the heat generated by the Nichrome coil in order to improve the reliabiiity of the Nichrome coil.

3. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salley et al. (U.S. Patent No: 5,254,952), in view of Suga et al. (U. S. Patent No. 5, 789, 935), and further in view of Bertness (U.S. Patent No: 6,331,762).

Referring to claims 23-25, Salley in view of Suga discloses the system of claim 13. Salley in view of Suga does not disclose that the terminal receives the alternator output signal through a wireless link, such as an infrared wireless link or a radio wave wireless link.

Bertness suggests, "various types of inputs and outputs can be provided through non-physical connections such as radio frequency or infrared communication techniques"(column 11, lines 47-50).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to further modify Salley to use the wireless communication techniques, as taught by Bertness, to simplify the process of evaluating the operation of the alternator, since it has been held to be within the general skill of a worker in the art to select a known tool for a known purpose on the basis of its suitability for the intended

use as a matter of obvious design choice (*In re Leshin,* 227 F.2d 197, 125 USPQ 416 (CCPA).

Allowable Subject Matter

4. Claim 29 is objected to as being dependent upon a rejected base claim (claim 13), but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments with respect to claims 1-16 and 23-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Stevens (U. S. Patent No. 4, 028, 616)--discloses an interval timer for timing a period of time to permit the battery current to stabilize.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy He whose telephone number is (703) 305-3360. The examiner can normally be reached on 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on 703-308-0750. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4900.

AH AH
December 23, 2003

N. Le
Supervisory Patent Examiner
Technology Center 2800